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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/820,328

04/07/2004

John Santhoff

029C-125

8509

44279 7590 02/03/2009
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EXAMINER

ODOM, CURTIS B

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

02/03/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/820,328	Applicant(s) SANTHOFF, JOHN	
	Examiner CURTIS B. ODOM	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4, 7, 11-14 and 30-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4, 7, 11-14 and 30-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/17/2008 have been fully considered but they are not persuasive. Regarding the Remarks (see pages 8-10), it is the understanding of the Examiner that Melick (US 2003/0228005) is prior art under 102(e) since the provisional application 60/376,592, from which it claims priority, contains the subject matter to support the rejection of the claims. MPEP 706.02(f)(1) [R-5] states **“For reference publications and patents of patent applications filed under 35 U.S.C. 111(a), the prior art dates under 35 U.S.C. 102(e) accorded to these references are the earliest effective U.S. filing dates. Thus, a publication and patent of a 35 U.S.C. 111(a) application, which claims *>benefit<* under 35 U.S.C. 119(e) to a prior U.S. provisional application or claims the benefit under 35 U.S.C. 120 of a prior nonprovisional application, would be accorded the earlier filing date as its prior art date under 35 U.S.C. 102(e), assuming the earlier-filed application has proper support for the subject matter as required by 35 U.S.C. 119(e) or 120.”** A copy of 60/376, 592 has been attached to show that the rejection is supported by the provisional application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 30-32 are rejected under 35 U.S.C 112, first paragraph as being a single means claim with under breadth. The claims cover every conceivable structure for achieving the stated property while the specification discloses at most only those known to the inventor. See MPEP § 2164.08(a).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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5. Claims 2-4, 7, 11-14, and 30-37 rejected under 35 U.S.C. 102(e) as being anticipated by Melick et al. (previously cited in Office Action 4/17/2008).

Regarding claims 2-4, Melick et al. discloses the ultra-wideband signal (Gaussian pulses) comprises an impulse radio signal (see sections 0197 and 0198), the ultra-wideband signal comprises a pulse of electromagnetic energy having a duration that can range between about 0.1 nanoseconds to about 100 nanoseconds (see sections 0167-0168, wherein 6.67 is in that range), and the ultra-wideband signal comprises a power that can range between about 30 power decibels to about -90 power decibels, as measured at a single frequency as shown in Fig. 1D.

Regarding claim 7, Melick et al. discloses the wire employed is a coaxial cable (see section 0208, 0252, and 0378).

Regarding claims 11-13, Melick et al. discloses the ultra-wideband signal (Gaussian pulses) comprises an impulse radio signal (see sections 0197 and 0198), the ultra-wideband signal comprises a pulse of electromagnetic energy having a duration that can range between about 0.1 nanoseconds to about 100 nanoseconds (see sections 0167-0167, wherein 6.67 is in that range), and the ultra-wideband signal comprises a power that can range between about 30 power decibels to about -90 power decibels, as measured at a single frequency as shown in Fig. 1D.

Regarding claim 14, Melick et al. discloses the ultra-wideband (Gaussian) signal is used to transmit high-speed data (see sections 0167, 0171, and 0181) and Internet communication data using a modem (see sections 0208, 0234 and 0378).

Regarding claims 30-32, Melick et al. discloses an ultra-wideband modem (see Fig. 18, section 0234) structured to receive UWB signals through a wireless or wired medium (see

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sections 0002, 0208, and 0378) and transmit UWB signals through wired or wireless media (see section 0378) or a combination thereof (see section 0002).

Regarding claim 33, Melick et al. discloses the ultra-wideband signal comprises a pulse of electromagnetic energy having a duration that can range between about 0.1 nanoseconds to about 100 nanoseconds (see sections 0167-0168, wherein 6.67 is in that range).

Regarding claims 34-37, Melick et al. discloses an ultra-wideband modem (see Fig. 18, section 0234) to receive UWB signals through a wireless or wired medium (see sections 0002, 0208, and 0378) and transmit UWB signals through wired or wireless media (see section 0378) or a combination thereof (see section 0002), wherein the ultra-wideband signal comprises a pulse of electromagnetic energy having a duration that can range between about 0.1 nanoseconds to about 100 nanoseconds (see sections 0167-0168, wherein 6.67 is in that range).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CURTIS B. ODOM whose telephone number is (571)272-3046. The examiner can normally be reached on Monday- Friday, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on 571-272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Curtis B. Odom/
Primary Examiner, Art Unit 2611
January 29, 2009